

Faktor Sosio-ekonomi pada Pb darah anak

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OR prevalensi pada cut-off Pb > 10 ppb untuk tingkat pendidikan adalah 2,092 (1,295 , 3,382).

Simpulan: kadar Pb darah anak tidak hanya dipengaruhi oleh kadar Pb udara ambien tetapi juga dipengaruhi oleh kondisi rumah, tingkat pendapatan dan pendidikan orang tua atau wali sampel anak.

KEADAAN SOSIO-EKONOMI DAN STATUS Pb DARAH ANAK PADA PEMAJANAN Pb LINGKUNGAN

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ABSTRACT

The influence of socio-economic factor on children blood lead level in environmental lead exposure.

Background: low level lead exposures usually are coming from various environmental sources including air, food and water. This has important implications with respect to its regulation. The socio-economic factors can also affect blood lead level in children. This study was aimed to examine the influence of housing condition, earning and education of children's primary caregivers on children blood lead levels.

Methods: the study involved 54 children with 5-10-year-old, coming from Gebang Sari, Sekaran and Moro Demak. Cross-sectional design was adopted in this research. The collected data were analyzed using non parametric Wilcoxon signed rank test to determine the mean differences of lead among the locations. OR prevalence and frequencies as well as cross tabulation of blood lead level and housing condition, earning and education data were also analyzed.

Result: There were significance differences amongst Gebang Sari, Sekaran and Moro Demak children blood lead levels ($p < 0.05$). Gebang Sari ambient lead air was the highest compared to those of other two locations. Compared to Sekaran and Moro Demak, Gebang Sari was dominated by higher children's primary caregivers earning and education levels. OR prevalence of > 10 ppb lead cut-off for earning level was 2,332 (1,49 , 3,65). OR prevalence of > 10 ppb lead cut-off for education level was 2,092 (1,295 , 3,382).

Conclusion: children blood lead levels were not only influenced by ambient air lead but also influenced by housing condition, earning and education of children's primary caregivers.

Key words: children blood lead level, housing condition, earning, education

ABSTRAK

Latar Belakang: toksisitas akibat pemajanan Pb lingkungan pada dosis rendah dapat berasal dari berbagai sumber seperti udara, air dan makanan. Hal ini mempunyai implikasi penting terhadap regulasi. Faktor sosio-ekonomi juga berpengaruh terhadap kadar Pb darah anak. Penelitian ini ditujukan untuk mempelajari pengaruh kondisi rumah, tingkat pendapatan dan pendidikan dari orang tua atau wali anak terhadap kadar Pb darah anak.

Metoda: penelitian mengikutsertakan 54 anak, umur 5-10 tahun, berasal dari Gebang Sari, Sekaran dan Moro Demak. Penelitian didesain secara cross-sectional. Data dianalisis secara non-parametrik dengan Wilcoxon signed rank test untuk mengetahui rerata kadar Pb darah anak antar lokasi. OR prevalensi, frekuensi dan tabulasi silang antara kadar Pb darah dengan kondisi rumah, pendapatan dan pendidikan juga dianalisis.

Hasil: Terdapat beda yang bermakna antara kadar Pb darah anak di Gebang Sari dan Sekaran dengan Kadar Pb darah anak di Moro Demak ($p < 0,05$). Kadar Pb udara ambien Gebang Sari tertinggi dibanding kadar Pb udara di dua lokasi lainnya. Tingkat pendapatan dan pendidikan orang tua atau wali sampel anak Gebang Sari lebih tinggi dibanding Sekaran dan Moro Demak.